

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Stupp Corp-Baton Rouge Facility
Stupp Corporation
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 1157
Activity Number: PER20080002
Proposed Permit Number: 0840-00147-V0**

I. APPLICANT

Company:
Stupp Corp
12555 Ronaldson Rd
Baton Rouge, Louisiana 70807

Facility:
Stupp Corp
12555 Ronaldson Rd
Baton Rouge, East Baton Rouge Parish, Louisiana
UTM Coordinates: 275.460 Kilometers East and 3216.11 Kilometers North, Zone 16

II. FACILITY AND CURRENT PERMIT STATUS

Stupp Corporation (hereinafter "Stupp"), an existing steel line pipe manufacturer located in Baton Rouge, Louisiana, originally operated under the name of Cal-Metal Pipe Corporation of Louisiana until the merger in 1991 with the St. Louis-based Stupp Bros. Inc. The facility currently operates under State Permit No. 0840-00147-06, issued April 21, 2008. Permitting activities at the facility occurred as follows:

State Permit No. 0840-00147-00 issued December 22, 1994 permitted the previously grandfathered facility which began operations in 1969. Stupp pipe products are utilized to transmit hydrocarbons for the energy needs of both industry and communities. Custom steel line pipe is produced using Electric Resistance Welded (ERW) Technology..

On September 13, 1995, Stupp was issued State Permit No. 0840-00147-01 to increase annual paint and thinner usage to 1710 and 3420 gallons, respectively.

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Changes allowed by State Permit No. 0840-00147-02 issued January 31, 1997 included

- Installation of a shear-end welder and spiral accumulator to allow continuous coil feed to the mill; and
- Installation of a laser stenciler to replace spray painting for identification of finished pipe.

State Permit No. 0840-00147-03 issued March 11, 2004, addressed changes in coolant and updated calculation methodologies.

On May 10, 2004, State Permit No. 0840-00147-04 was approved and allowed Stupp to do the following:

- Eliminate the water-base pipe coating process (96-8) and replace it with a metal shot blasting and filter operation (04-1);
- Replace existing natural gas-fired furnace with a similar size natural gas-fired furnace. The new furnace was classified as an insignificant activity just as the previous furnace;
- Delineate the following point sources to insignificant activity status: Diesel Storage Tank (96-1), Emergency Diesel Generator (96-3), Pipe Cooling Vent (96-6) and Water Evaporator (02-1);
- Update emission rates for the Gasoline Storage Tank (96-2), Painting and Hand Stenciling Operation (96-4), Welding Operations (96-5) and Thinner Cleanup Operations (02-3) to reflect changes in emission factors and increases in operating hours;
- Delete the Smoke Collection System (02-2); and
- Add the existing cooling tower to the permit as an insignificant activity.

State Permit No. 0840-00147-05 approved February 15, 2007, included:

- An increase in permitted throughput and emissions for source ARE1 (96-4), Painting and Hand Stenciling Operations;
- Deletion of source ARE4 (04-1), Wheelabrator Shot Chamber and Filter;
- Reconciliation of emission calculations for four sources, ARE3 (02-3) Thinner Cleanup Operation, EQT4 (96-5) Welding Operation, EQT14 (04-2) Pipe Furnace, and EQT15 (96-2) Gasoline Storage Tank; and
- Deletion of two insignificant activities, the Water Evaporator and the Water Evaporator Heater.

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An administrative Amendment to State Permit No. 0840-00147-05, dated May 29, 2007, removed Specific Requirement Numbers 13 and 14 concerning LAC33.III.2103 from the gasoline tank because the gasoline tank is a 1000 gallon tank equipped with a submerged fill pipe and is not subject to the vapor pressure determination requirements.

State Permit No. 0840-00147-06, dated April 21, 2008 consisted of:

- An increase in permitted throughput and emissions for source ARE1 (96-4), Painting and Hand Stenciling Operations;
- Deletion of source EQT14 (04-2); Pipe Furnace;
- Reconciliation of emission calculations for source, ARE3 (02-3) Thinner Cleanup Operation; and
- The addition of a new Spiral Mill Welding Operation, (08-1).

Existing and proposed processes at the Stupp Baton Rouge Facility include:

LINE MILL

The manufacturing process involves making line pipe out of coiled rolls of low alloy steel. The steel coils are unrolled and flattened at the pipe-manufacturing mill. The flat sheet of steel is fed through a "slitter" that cuts the steel into the appropriate width for the specified diameter of pipe to be produced. The flattened steel is then fed through hardened rollers that bend the steel into a tube shaped cylinder. The tube is fed through an electric resistance welder (ERW) that fuses the edges together to produce a joint of pipe.

Once welding is complete, the newly formed pipe is heated to normalize the weld seam and refine the grain structure of the steel to its original pre-welding form. After heat-treating the pipe, it is quenched to room temperature to allow for proper sizing and strengthening. Each length of pipe is automatically cut to a specified length using a rotary cut-off-machine. The pipe is pressure tested with water and the ends are beveled. Finished pipe is marked using spray paint and stencils and loaded onto rail cars by a Gantry crane or onto trucks using forklifts.

NEW SPIRAL MILL

This production process is designed as a two-stage welding operation. A continuous tack weld is applied on the spiral weld machine. The final weld is applied on one of three submerged arc welding lines. The spiral weld line will be equipped to process coils up to 50 tons and 80 inches wide. Coils will be welded together to provide a continuous process through the spiral weld machine. Edge milling will provide profiles to support downstream welding operations. Weld quality on both spiral and finished welding lines is continuously monitored electronically for consistency.

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PIPE LABELING PROCESS

Labels with both conventional, as well as two-dimensional bar codes are attached to the ID surface of each pipe for tracking. The conventional bar code consists of the traceable Pipe ID number. The two-dimensional bar code is encoded with all of the pipe data that is printed on the label. The label is in addition to required paint markings.

Stupp Corp is a designated Part 70 source.

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III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by Stupp on June 9, 2008 requesting a Part 70 operating permit.

Project

This air permit addresses Stupp's change in status from a minor source of hazardous air pollutants/toxic air pollutants (HAP/TAP) to a major source. Pursuant to the provisions of Louisiana Administrative Code Title 33, Part III, Chapter 5, Section 525 (LAC 33:III.525), and in accordance with Specific Condition 15 of State Permit No. 0840-00147-06, approved April 21, 2008, the Stupp Mill in Baton Rouge prepared this request for an Initial Title V Operating Permit. Stupp is adjacent to the Bayou Coating facility. The Bayou Coating facility recently increased coating operations and was therefore reclassified as a major source of HAP/TAP and was issued Part 70 Operating Permit No. 27559 on July 27, 2007. Since both facilities are co-located and under common control of Stupp Brothers, the Stupp Mill facility is also required to obtain a Title V permit.

Proposed Permit

Permit 0840-00147-V0 will be the initial Part 70 operating permit for Stupp Corp.

In addition to obtaining a Part 70 Operating Permit as required by Specific Condition 15 of State Permit No. 0840-000147-06, for the existing Line Pipe Mill and the new Spiral Mill scheduled for completion in 2009, Stupp Corporation proposes the following modifications in this permitting activity:

- Increase gasoline throughput to 7,500 gallons per year (VOC increase of 0.2 tpy);
- Decrease VOC emissions from painting activities; and
- Increase VOC emissions from thinning operations (net increase of 1.84 tpy VOC).

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Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Permitted	Proposed	Change
PM ₁₀	0.31	0.31	0.0
SO ₂	0.00	0.00	0.00
NO _x	0.00	0.00	0.00
CO	0.00	0.00	0.00
VOC *	17.15	18.99	+1.84

***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Benzene	0.001	0.001	-
Ethyl Benzene	0.142	0.208	+0.066
Glycol Ethers	0.969	1.038	+0.069
Methanol	0.772	1.369	+0.597
Methyl Ethyl Ketone	1.22	0.646	-0.574
Methyl Isobutyl Ketone	0.06	0.073	+0.013
Naphthalene	0.169	0.267	+0.098
Toluene	4.725	6.853	+2.128
Xylene	0.497	0.566	+0.069
Total	8.555	11.021	+2.466

***HRVOC Speciation :**

Toluene

Xylene

***Other VOC (TPY):** 7.969

Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Chromium and compounds	-	<0.001	+<0.001
Manganese and compounds	0.0	0.010	+0.010
Nickel and compounds	-	<0.001	+<0.001
Total	0.0	0.010	+0.010

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IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

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Applicability and Exemptions of Selected Subject Items

ID No:	Requirement	Notes
UNF01 Stupp Corp	40 CFR 64-Compliance Assurance Monitoring [40 CFR 64.1 -64.10]	DOES NOT APPLY. The PSEUs do not meet the applicability requirements. None of the emission sources are equipped with control devices to achieve compliance and none of emission sources have potential pre-control device emissions equal to or greater than 100 percent of the major source threshold limit.
	National Emission Standards for Organic Hazardous Air Pollutants For Surface Coating of Miscellaneous Metal Parts and Products [40 CFR 63 Subpart M] [40 CFR 63.3981]	DOES NOT APPLY. Facility does not apply coatings as defined in the MACT. 40 CFR 63.3981
	40 CFR 68 –Chemical Accident Prevention	DOES NOT APPLY. Facility does not produce, process, handle, or store any listed substances in quantities greater than the threshold quantities.
	40 CFR 82 –Stratospheric Ozone Protection	Motor Vehicle Air Conditioners are not maintained, serviced, repaired, or disposed of at this facility, therefore the facility is not subject to standards for recycling and emissions reduction.
	Emission Standards for Sulfur Dioxide [LAC 33:III.1511.A]	DOES NOT APPLY. There are no single point sources that emit or have the potential to emit > 5 tons per year of SO ₂ .

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ID No:	Requirement	Notes
UNF01 Stupp Corp Continued	Pumps and Compressors [LAC 33:III.2111]	DOES NOT APPLY. There are no pumps or compressors handling volatile organic compounds having a true vapor pressure of ≥ 1.5 psia at handling conditions at the facility.
	Control of Emissions of Nitrogen Oxides [LAC 33:III.Chapter 22]]	DOES NOT APPLY. There are no regulated emission sources of NOx at the facility.
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.Chapter 59]]	DOES NOT APPLY. Facility does not produce, process, handle, or store any listed substances in quantities greater than the threshold quantities.
EQT 15 96-2	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Storage tank capacity is < 1000 gallons.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Storage tank capacity is < 1000 gallons
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Storage tank capacity is < 1000 gallons

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Prevention of Significant Deterioration/Nonattainment New Source Review

Emissions of criteria pollutants from the facility are below PSD/Non-attainment New Source Review major source thresholds. PSD/Non-attainment New Source Review is not required,

Streamlined Equipment Leak Monitoring Program

None

MACT Requirements

None

Air Quality Analysis

Emissions associated with the proposed facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

The permit does not include any Permit Shields.

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VI. PERIODIC MONITORING

The monitoring, reporting and recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

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VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

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Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.